

SOME NEW DIPTERA.

BY CHARLES ROBERTSON, CARLINVILLE, ILLINOIS.

Zodion palpalis, n. sp.

♀.—Black, gray pollinose; face yellow, cheeks yellow, one-half the eye height; front reddish yellow, a narrow black line on each side above; antennæ reddish, second joint shorter than third; palpi black, quite long, clavate; mesonotum without stripes; scutellum with about twelve slender bristles; legs black, knees testaceous; wings subhyaline; first four segments of abdomen with large, subtriangular opaque black spots, last segment black, shining. Length, 5 mm.

♂.—Cheeks more than one-half the eye height; second and third segments of abdomen yellow, fourth with a subtriangular patch destitute of pollen. Length, 5 mm.

Carlenville, Illinois; one ♀, nine ♂ specimens. All except one specimen have the first posterior cell closed and petiolate.

This species is quite distinct from *Z. fulvifrons* and *Z. nanellum*.

Sphagina campanulata, n. sp.

♂.—Front black, grayish pollinose, with a median, narrow shining stripe; occiput black, lightly dusted; thorax and abdomen entirely reddish, the latter more shining, fourth segment in one specimen a little infuscated with blackish; face, cheeks, antennæ, proboscis and halteres more yellow; front and middle legs whitish, last two joints of their tarsi blackish; hind legs reddish, base of femora, tibiæ, except tips, and joints two and three of their tarsi whitish, last two joints of tarsi blackish; wings subhyaline, anterior outer angle of first posterior cell rectangular; second joint of abdomen longer than remaining joints together, fourth segment shorter and wider than third, the two regularly widening from base of three to apex of four, hypopygium very large. Length, 6–7 mm.

Carlenville, Illinois; two specimens.

Mallota Illinoensis, n. sp.

♀.—Eyes bare; face deeply concave below antennæ, tubercle as usual, the cheeks and median stripe shining black; front broader than in *M. posticata* and *cimbiciformis*, yellow pollinose, except a patch above antennæ, yellow pilose, on the vertex the pile long and reddish, antennæ blackish, second joint and arista reddish; mesonotum reddish posteriorly, with obscure pollinose streaks anteriorly, scutellum yellow and with the mesonotum clothed with long reddish pile; legs reddish, the femora more

or less blackish, the knees yellow, pile yellow ; wings with a brown cloud ; abdomen brown, shining, with thin fuscous pile, the pile on the sides, middle and apical margins longer, yellowish, less erect. Length, 14 mm.

♂.—Eyes separated, pile and pollen of face more whitish, anterior and middle femora darker, abdomen inclining to ferruginous, hind femur beneath presenting a dentiform angle bearing a tuft of black pile, sides of second segment presenting a depression which shows a purplish reflection. Length, 12–13 mm.

Carlinville, Illinois ; one ♀, two ♂ specimens.

Temnostoma trifasciata, n. sp.

This species closely resembles *T. bombylans*, but the wings are brown before, that colour not extending behind the fourth longitudinal vein ; the abdomen of female has only three fasciæ.

Carlinville, Illinois ; three ♂, two ♀ specimens.

Phorantha purpurascens, Twms.

Hyalomyia purpurascens, Townshend. Proc. Ent. Soc., Wash. 2 : 137, 1891. This species was described from four males and four females from my collection. It is more common in my neighbourhood than all of the other species of *Phorantha* and *Alophora* together. I know the species very well. I still have eighteen specimens from the set from which the types were described. Altogether I have forty males of this species and they all have the calypteres brown. On the other hand, twenty-one females have the calypteres whitish.

From the material afforded in my neighbourhood, I think that Coquillett's *P. occidentis* contains the females of at least three distinct species. Assuming that Walker's type was a female and that it was the commonest species, *P. purpurascens* may be a synonym. I do not believe that, without comparing the type, it can be shown that Walker's species was the same as *P. purpurascens*, or even that it was a *Phorantha*.

Hyalomyia Robertsonii, Twms., was also founded on specimens from my collection. I do not know what it is, but the specimens were larger than those of *P. purpurascens*, and all of the specimens I have that were referred by me to this species belong to *Alophora*. I think they are females of *A. aneovertris*.

Phorantha pruinosa, n. sp.

♂.—Closely resembles the male of *P. purpurascens*, but the abdomen

is black, without any metallic reflection, the first segment shining, the second, third and fourth densely whitish pollinose. Length, 3 mm.

Carlinville, Illinois; three male specimens.

Phorantha humeralis, n. sp.

♂.—Closely resembles the male of *P. purpurascens*, but is larger, the wings more whitish, the base and costal margin as far as first vein more or less brown. Length, 4-5 mm.

♀.—Differs from females of *P. purpurascens* only in its larger size. Length, 4-5 mm.

Carlinville, Illinois; ten ♂, three ♀ specimens.

Epigrimyia Illinoensis, n. sp.

♂.—Closely resembles *E. polita*, front shorter and narrower, more narrow than face; the latter longer, wider, cinereous pollinose; cheeks wider; antennæ and proboscis longer; front tibiæ reddish; claws and pulvilli longer. Length, 5 mm.

Carlinville, Illinois; one ♂ specimen.

Winthemia Illinoensis, n. sp.

This species closely resembles *W. quadripustulata*. It differs in its smaller size, the bristles on the abdomen, especially in the male, more sparse, more erect, longer; the second segment in male with a marginal pair of macrochætæ; hind tibiæ, outwardly, in both sexes, less regularly ciliate and presenting a long bristle near the middle. Length, 6-9 mm.

Carlinville, Illinois; five ♂, three ♀ specimens. The sexes were taken in copula.

The name may not stand: the presence of this species seems to throw some doubt on Coquillett's synonymy of *W. quadripustulata*.

NEW BEES OF THE SUBFAMILY ANTHOPHORINÆ FROM SOUTHERN CALIFORNIA.

BY T. D. A. COCKERELL, E. LAS VEGAS, N. M.

Diadasia rinconis, subsp. *opuntia*, nov.—♀. About 15 millim. long, varying to 13 millim.; tegulæ light reddish-brown, varying to darker; wing-nervures piceous, second submarginal cell variable, but always small and usually very narrow, and narrowed above; third submarginal cell long, very strongly elbowed at end; labrum with only a few scattered hairs, or sometimes more hairy; mesothorax strongly and quite densely punctured, much more so than in *rinconis*; scutellum closely punctured;